

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 10/050,604
Attorney Docket No. Q68036

REMARKS

Reconsideration and allowance of this application are respectfully requested. Claim 1 has been amended to substantially include the elements of dependent claim 7¹. Claim 7 has subsequently been cancelled. Claims 1, 3-6 and 8 are now pending in the application. The rejections are respectfully submitted to be obviated in view of the amendments and remarks presented herein.

Rejection Under 35 U.S.C. § 102(e) - Kikuchi et al.

Claims 1 and 8 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Kikuchi et al. (U.S. Patent Number 6,885,616; hereinafter “Kikuchi”). The rejection is respectfully traversed.

Applicant’s claimed invention relates to an aberration correcting apparatus, correcting aberration in an optical path of an optical system which irradiates a recording medium with a light beam and guides the light beam reflected from the recording medium. The apparatus includes an object lens, a first aberration correction element, a driver, a second aberration correction element, a phase adjuster, a light receiver and a controller. The object lens focuses the light beam on the recording medium. The second aberration correction element is integrally formed with the object lens so as to be in alignment with each other. The phase adjuster corrects a residual aberration after correction by the first aberration correction element.

¹ Support for this amendment is also found in the specification on at least page 7, lines 7-10 and page 15, lines 3-5.

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Turning to the cited art, Kikuchi discloses an optical pickup apparatus and information recording and/or reproducing apparatus as shown in Figure 9. However, there is no teaching or suggestion in Kikuchi of “a second aberration correction element being integrally formed with said object lens so as to be in alignment with each other,” as recited in amended claim 1. The Examiner contends on page 3 of the Office Action that Kikuchi suggests that it is possible to arrange the phase device (12) (corresponding with the claimed second aberration correction element) on the objective lens (14) side. However, Kikuchi merely discloses that the positions of the phase device (12) and the spherical aberration compensation lens (13) can be exchanged (column 15, lines 34-44). Therefore, Kikuchi fails to teach or suggest a second aberration correction element which is formed integrally with an object lens, as recited in amended claim 1.

At least by virtue of the aforementioned differences, the invention defined by Applicant’s claim 1 is patentable over Kikuchi. Applicant’s claim 8 is a dependent claim including all of the elements of independent claim 1, which as established above, distinguishes over Kikuchi. Therefore, claim 8 is distinguished over Kikuchi for at least the aforementioned reasons as well as for its additionally recited features. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e) are respectfully requested.

Rejection Under 35 U.S.C. § 103(a) - Kikuchi et al. in view of Best et al.

Claims 3 and 4 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Kikuchi in view of Best et al. (U.S. Patent Number 5,905,700; “Best”). The rejection is respectfully traversed.

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Kikuchi fails to teach or suggest a “a second aberration correction element being integrally formed with said object lens so as to be in alignment with each other,” as recited in amended claim 1. Best does not remedy the deficiencies of Kikuchi. Best discloses a multiple data surface aberration compensator as shown in Figure 14, however, there is also no teaching or suggestion in Best of a second aberration correction element integrally formed with an object lens so as to be in alignment with each other. At least by virtue of the aforementioned differences, the invention defined by Applicant’s claim 1 is patentable over Kikuchi in view of Best. Claims 3 and 4 are dependent claims including all of the elements of independent claim 1. Therefore, claims 3 and 4 are distinguished over Kikuchi in view of Best for at least the aforementioned reasons as well as for their additionally recited features. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

Rejection Under 35 U.S.C. § 103(a) - Kikuchi et al. in view of Ueda et al.

Claims 5 and 6 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Kikuchi in view of Ueda et al. (U.S. Patent Number 6,418,108; “Ueda”). The rejection is respectfully traversed.

Kikuchi fails to teach or suggest a “a second aberration correction element being integrally formed with said object lens so as to be in alignment with each other,” as recited in amended claim 1. Ueda does not remedy the deficiencies of Kikuchi. Ueda discloses an optical head used for recording and/or reproducing an information recording medium, the optical head including a collimator lens (13) as shown in Figure 1, however, there is also no teaching or suggestion in Ueda of a second aberration correction element integrally formed with an object

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lens so as to be in alignment with each other. At least by virtue of the aforementioned differences, the invention defined by Applicant's claim 1 is patentable over Kikuchi in view of Ueda. Claims 5 and 6 are dependent claims including all of the elements of independent claim 1. Therefore, claims 5 and 6 are distinguished over Kikuchi in view of Ueda for at least the aforementioned reasons as well as for its additionally recited features. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

Newly Added Claims

Applicant has added new claims 9 and 10 to provide more varied protection for the present invention². Claims 9 and 10 are allowable based on at least their dependencies, as well as for their additionally recited features. That is, the cited references do not teach or suggest that the "second aberration correction element and said object lens are aligned such that their optical axes are in alignment with each other," as recited by claim 9, or that the "first aberration correction element mainly corrects low-order and large aberrations, and said second aberration correction element principally corrects high-order and small aberrations," as recited by claim 10.

Conclusion

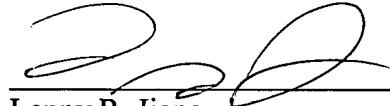
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

² Support for these claims is found in the specification on at least page 7, lines 7-10, page 14, lines 14-16 and page 15, lines 5-7.

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Respectfully submitted,



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